

**From:** [Graham, Amy](#)  
**To:** [Bowman, Liz](#)  
**Cc:** [Gray, David](#); [Grantham, Nancy](#)  
**Subject:** Re: Current Statement - Updated this am, will be updated again around 5 p.m. with new data  
**Date:** Monday, September 4, 2017 2:06:27 PM

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Will send this to all the outstanding requests.

Sent from my iPhone

On Sep 4, 2017, at 2:42 PM, Bowman, Liz <[Bowman.Liz@epa.gov](mailto:Bowman.Liz@epa.gov)> wrote:

**Additional EPA/TCEQ Background:**

Working together, the U.S. Environmental Protection Agency (EPA) and the Texas Commission on Environmental Quality (TCEQ) continue to coordinate with local, state and federal officials to address the human health and environmental impacts of Hurricane Harvey and its aftermath, especially the water systems in the affected areas. EPA has about 145 personnel and TCEQ has about 500 people supporting the response efforts for Hurricane Harvey and have established a Unified Command with other state and federal partners, and are in the field conducting work. TCEQ response information is available at <https://www.tceq.texas.gov/response/hurricanes>.

**Arkema Facility Update**

It is the understanding of personnel on the ground that the remaining trailers were at risk of catching fire over the next few days. Rather than allow for a potential catastrophic event, the Crosby Volunteer Fire Department and the Harris County Fire Marshal's Office performed a controlled burn of the material. First responders were outside the evacuation zone, in the area, for quick response to ensure the safety of the community around the facility.

TCEQ and EPA continue to monitor smoke and air quality, the potential for additional fires in the area, and have aerial assets ready to be deployed, as needed. Everyone in the area should follow the safety instruction of local authorities, specifically staying out of the evacuation zone, avoiding smoke and flood waters.

**Flood Water**

Water quality sampling will be focused on industrial facilities and hazardous waste sites. Floodwaters contain many hazards, including bacteria and other contaminants. Precautions should be taken by anyone involved in cleanup activities or any others who may be exposed to flood waters. These precautions include heeding all warnings from local and state authorities regarding safety

advisories. In addition to the drowning hazards of wading, swimming, or driving in swift floodwaters, these waters can carry large objects that are not always readily visible that can cause injuries to those in the water. Other potential hazards include downed power lines and possible injuries inflicted by animals displaced by the floodwaters.

### **Air Monitoring**

State toxicologists have pulled real-time and analytical air monitoring data and will provide a detailed, and comprehensive report in coming days. EPA and TCEQ will release this information as soon as it is publicly available, and encourage people in the affected areas to continue to follow the advice of county first responders and the sheriff's office.

Due to quick action and proper preparation by state authorities, all the ambient air quality monitors in the network from south of Corpus Christi to Beaumont were protected before the storm. Since then, state authorities are working to get the systems up and running again. As of Saturday, September 2, over 88 percent of monitors are up and working again in Corpus Christi, 85 percent in Houston, and 36 percent in Beaumont. Of the available air monitoring data collected from August 24-September 2, 2017, all measured concentrations were well below levels of health concern. Updates will be coming daily or every-other day depending on the levels found in coming days.

EPA had its surveillance aircraft conducting air monitoring around the Arkema plant fire. Also, EPA's mobile air-monitoring unit is in Houston to assist with air monitoring as well. And, EPA's mobile air monitoring Trace Atmospheric Gas Analyzer bus is on the way to Houston to provide additional assistance with air monitoring. The TAGA is a self-contained mobile laboratory capable of real-time sampling and of outdoor air or emissions. The instrumentation refers both to the analytical instrument and the mobile laboratory built around it.

### **Drinking Water (as of 9/2)**

Half (2300) of the 4500 drinking water systems potentially affected by Harvey have been contacted. Of those: approximately 1514 systems are fully operational, 166 have boil-water notices, and 50 are shut down. The agencies are contacting remaining systems to gather updated information of their status. Assistance Teams are in the field working directly with system operators to expedite bringing systems back to operational status. Additional drinking water assessments should be up and running within the next day.

### **Waste Water and Sewage (as of 9/2)**

Approximately 794 of approximately 1219 wastewater treatment plants are fully operational in the affected counties. The agencies are aware that releases of

wastewater from sanitary sewers that is occurring, due to the historic flooding and are actively working to monitor facilities that have reported spills, conduct outreach and provide technical guidance to all other wastewater facilities in flood-impacted areas. EPA and TCEQ are working closely with the Texas National Guard, including the 6<sup>th</sup> Civil Support Team (supporting TCEQ in Corpus Christi), Arkansas National Guard, 61<sup>st</sup> Civil Support Team (supporting TCEQ in Houston), and the Texas State Guard Engineering Group, and other local and state agencies to continuously monitor wastewater systems. Assistance Teams will be deployed to work directly with system operators to expedite bringing systems back to operational status.

### **Residential Wells**

EPA is developing a plan for sampling residential wells, and is coordinating with TCEQ to establish several locations where residents can bring water samples from their wells to be tested. If a private well is flooded, the water should not be used from the well until the following three things have occurred: flood waters have receded from the well and the plumbing system, the well has been disinfected as well as the plumbing, and the well has been sampled and laboratory analysis has confirmed that the disinfected water contains no bacterial contaminants.

Guidance for private well owners can be found at

[www.tceq.texas.gov/response/hurricanes](http://www.tceq.texas.gov/response/hurricanes).

### **Critical Water Infrastructure**

The agencies are continuing to work closely with dams. The larger dams are full in many cases and may be releasing water; the structures are secure at this time. There are 340 high- and significant-hazard dams in the impacted areas, and TCEQ has been able to make contact with 200 of these dam owners. Of these 200, only five dams have been damaged or have failed. We have also been notified that three low-hazard dams have damage. TCEQ is continuing to contact dams to get status updates.

### **Superfund Hazardous Waste Sites**

As of Sunday, EPA has conducted initial assessments at 41 Superfund sites in the impacted areas using aerial images, as well as direct contact with the parties responsible for on-going cleanup activities. EPA has determined that 28 Superfund sites in the area do not currently show damage or excessive flooding associated with Harvey. EPA determined that 13 sites have been flooded and/or are experiencing possible damage due to the storm. Of these sites, two (Falcon Refinery and the Brine Service) have been inspected and it has been determined that they do not require emergency cleanup; although, additional sampling in the area will continue to be conducted. Eleven sites, including: Bailey Waste Disposal, French LTD, Geneva Industries/Fuhrmann Energy, Gulfco Marine, Highland Acid

Pit, Malone Services, U.S. Oil Recovery, Patrick Bayou, Petro-Chemical Systems, Triangle Chemical, and San Jacinto Waste Pits have not been accessible by response personnel. Teams are in place to investigate possible damage to these sites as soon flood waters recede, and personnel are able to safely access the sites. The San Jacinto Waste Pits site has a temporary armored cap designed to prevent migration of hazardous material; the cap will be inspected as soon as it is safe for teams access the site. Based on forecasted river conditions, this inspection is planned for today, by boat. EPA has dive teams to survey the cap underwater when conditions allow.

#### **Refineries/Fuel Waivers**

In addition to waivers for 38 states and D.C., EPA signed four No Action Assurance (NAA) letters on September 1, to help address fuel shortages. NAA will help expedite the distribution of existing gasoline supplies to both Texas and Louisiana, while the refineries work to re-start and resume normal operations. Each is effective until September 15, 2017, and should allow for the distribution in Texas of 10 million or more gallons of gasoline to consumers.

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